

# SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2015/830



## MULTICLEAN

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

**Product name** : MULTICLEAN  
**Registration number REACH (\*)** : Not applicable (mixture)  
**Product type REACH (\*)** : Mixture

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1 Relevant identified uses

Detergent according to Regulation (EC) No 648/2004  
Degreasing agent

##### 1.2.2 Uses advised against

No uses advised against

#### 1.3. Details of the supplier of the safety data sheet

##### Supplier of the safety data sheet

TEC7\*  
Industrielaan 5B  
B-2250 Olen  
☎ +32 14 85 97 37  
☎ +32 14 85 97 38  
info@tec7.be  
\*TEC7 is a registered trademark of Novatech International  
Industrielaan 5B

##### Manufacturer of the product

Novatech International N.V.  
Industrielaan 5B  
B-2250 Olen  
☎ +32 14 85 97 37  
☎ +32 14 85 97 38  
info@tec7.be

##### Distributor of the product

Olmurtech  
P.O. BOX 5939  
Brendale DC, QLD. 4500  
Australia  
☎ +61 0 426 177 310  
[www.olmurtech.com.au](http://www.olmurtech.com.au)

#### 1.4. Emergency telephone number

New Zealand National Poisons Centre  
24 hour contact within NZ ☎ 0800 764 766 (0800POISON)  
24 hour contact from outside NZ ☎ +64 3 479 7248

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Aerosol	category 1	H222: Extremely flammable aerosol.
Aerosol	category 1	H229: Pressurised container: May burst if heated.

#### 2.2. Label elements



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<b>Signal word</b>	Danger
<b>H-statements</b>	
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
<b>P-statements</b>	
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122°F.

## 2.3. Other hazards

Gas/vapour spreads at floor level: ignition hazard

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark
2-butoxyethanol 01-2119475108-36	111-76-2 203-905-0	C≤5 %	Acute Tox. 4; H332 Acute Tox. 4; H312 Acute Tox. 4; H302 Eye Irrit. 2; H319 Skin Irrit. 2; H315	(1)(2)(10)	Constituent
propan-2-ol 01-2119457558-25	67-63-0 200-661-7	0.1%<C<1%	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	(1)(2)(10)	Constituent
ammonia	1336-21-6 215-647-6	C<5 %	Skin Corr. 1B; H314 Aquatic Acute 1; H400	(1)(2)(8)(10)	Constituent
butane 01-2119474691-32	106-97-8 203-448-7	5%<C<15%	Flam. Gas 1; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)	Propellant
propane 01-2119486944-21	74-98-6 200-827-9	C<5 %	Flam. Gas 1; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)	Propellant

(1) For H-statements in full: see heading 16

(2) Substance with a Community workplace exposure limit

(8) Specific concentration limits, see heading 16

(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General:

If you feel unwell, seek medical advice.

#### After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

#### After skin contact:

Rinse with water. Take victim to a doctor if irritation persists.

#### After eye contact:

Rinse with water. Take victim to an ophthalmologist if irritation persists.

#### After ingestion:

Rinse mouth with water. Consult a doctor/medical service if you feel unwell.

### 4.2. Most important symptoms and effects, both acute and delayed

#### 4.2.1 Acute symptoms

##### After inhalation:

EXPOSURE TO HIGH CONCENTRATIONS: Central nervous system depression. Headache. Nausea. Disturbances of consciousness.

##### After skin contact:

No effects known.

##### After eye contact:

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Redness of the eye tissue.

**After ingestion:**

Gastrointestinal complaints. Diarrhoea. Headache. Vomiting. Disturbances of consciousness.

**4.2.2 Delayed symptoms**

No effects known.

**4.3. Indication of any immediate medical attention and special treatment needed**

If applicable and available it will be listed below.

## SECTION 5: Firefighting measures

**5.1. Extinguishing media**

**5.1.1 Suitable extinguishing media:**

Water spray. Polyvalent foam. BC powder. Carbon dioxide.

**5.1.2 Unsuitable extinguishing media:**

No unsuitable extinguishing media known.

**5.2. Special hazards arising from the substance or mixture**

Upon combustion: CO and CO<sub>2</sub> are formed. Pressurised container: May burst if heated.

**5.3. Advice for firefighters**

**5.3.1 Instructions:**

If exposed to fire cool the closed containers by spraying with water. Physical explosion risk: extinguish/cool from behind cover. Do not move the load if exposed to heat. After cooling: persistent risk of physical explosion.

**5.3.2 Special protective equipment for fire-fighters:**

Gloves. Safety glasses. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment.

**6.1.1 Protective equipment for non-emergency personnel**

See heading 8.2

**6.1.2 Protective equipment for emergency responders**

Gloves. Safety glasses. Protective clothing.

Suitable protective clothing

See heading 8.2

**6.2. Environmental precautions**

Dam up the liquid spill.

**6.3. Methods and material for containment and cleaning up**

Liquid spill: dilute with water. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

**6.4. Reference to other sections**

See heading 13.

## SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

**7.1. Precautions for safe handling**

Use spark-/explosionproof appliances and lighting system. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Gas/vapour heavier than air at 20°C. Observe normal hygiene standards. Keep container tightly closed.

**7.2. Conditions for safe storage, including any incompatibilities**

**7.2.1 Safe storage requirements:**

Storage temperature: < 50 °C. Protect against frost. Keep out of direct sunlight. Keep container in a well-ventilated place. Fireproof storeroom. Meet the legal requirements.

**7.2.2 Keep away from:**

Heat sources, ignition sources.

**7.2.3 Suitable packaging material:**

Aerosol.

**7.2.4 Non suitable packaging material:**

No data available

**7.3. Specific end use(s)**

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If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 Occupational exposure

##### a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

#### EU

2-Butoxyethanol	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	20 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	98 mg/m <sup>3</sup>
	Short time value (Indicative occupational exposure limit value)	50 ppm
	Short time value (Indicative occupational exposure limit value)	246 mg/m <sup>3</sup>
Ammonia, anhydrous	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	20 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	14 mg/m <sup>3</sup>
	Short time value (Indicative occupational exposure limit value)	50 ppm
	Short time value (Indicative occupational exposure limit value)	36 mg/m <sup>3</sup>

#### Belgium

2-Butoxyéthanol	Time-weighted average exposure limit 8 h	20 ppm
	Time-weighted average exposure limit 8 h	98 mg/m <sup>3</sup>
	Short time value	50 ppm
	Short time value	246 mg/m <sup>3</sup>
Alcool isopropylique	Time-weighted average exposure limit 8 h	200 ppm
	Time-weighted average exposure limit 8 h	500 mg/m <sup>3</sup>
	Short time value	400 ppm
	Short time value	1000 mg/m <sup>3</sup>
Ammoniac	Time-weighted average exposure limit 8 h	20 ppm
	Time-weighted average exposure limit 8 h	14 mg/m <sup>3</sup>
	Short time value	50 ppm
	Short time value	36 mg/m <sup>3</sup>
Hydrocarbures aliphatiques sous forme gazeuse : (Alcanes C1-C4)	Time-weighted average exposure limit 8 h	1000 ppm

#### The Netherlands

2-Butoxyethanol	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	20 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	100 mg/m <sup>3</sup>
	Short time value (Public occupational exposure limit value)	50 ppm
	Short time value (Public occupational exposure limit value)	246 mg/m <sup>3</sup>
2-Propanol	Time-weighted average exposure limit 8 h (Private occupational exposure limit value)	260 ppm
	Time-weighted average exposure limit 8 h (Private occupational exposure limit value)	650 mg/m <sup>3</sup>
Ammoniak	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	20 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	14 mg/m <sup>3</sup>
	Short time value (Public occupational exposure limit value)	51 ppm
	Short time value (Public occupational exposure limit value)	36 mg/m <sup>3</sup>
n-Butaan	Time-weighted average exposure limit 8 h (Private occupational exposure limit value)	592 ppm
	Time-weighted average exposure limit 8 h (Private occupational exposure limit value)	1430 mg/m <sup>3</sup>

#### France

2-Butoxyéthanol	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	10 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	49 mg/m <sup>3</sup>

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2-Butoxyéthanol	Short time value (VRC: Valeur réglementaire contraignante)	50 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	246 mg/m <sup>3</sup>
Alcool isopropylique	Short time value (VL: Valeur non réglementaire indicative)	400 ppm
	Short time value (VL: Valeur non réglementaire indicative)	980 mg/m <sup>3</sup>
Ammoniac anhydre	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	10 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	7 mg/m <sup>3</sup>
	Short time value (VRC: Valeur réglementaire contraignante)	20 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	14 mg/m <sup>3</sup>
n-Butane	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	800 ppm
	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	1900 mg/m <sup>3</sup>

## Germany

2-Butoxyethanol	Time-weighted average exposure limit 8 h (TRGS 900)	10 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	49 mg/m <sup>3</sup>
Ammoniak	Time-weighted average exposure limit 8 h (TRGS 900)	20 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	14 mg/m <sup>3</sup>
Butan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	2400 mg/m <sup>3</sup>
Propan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	1800 mg/m <sup>3</sup>
Propan-2-ol	Time-weighted average exposure limit 8 h (TRGS 900)	200 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	500 mg/m <sup>3</sup>

## UK

2-Butoxyethanol	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	25 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	123 mg/m <sup>3</sup>
	Short time value (Workplace exposure limit (EH40/2005))	50 ppm
	Short time value (Workplace exposure limit (EH40/2005))	246 mg/m <sup>3</sup>
Ammonia, anhydrous	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	25 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	18 mg/m <sup>3</sup>
	Short time value (Workplace exposure limit (EH40/2005))	35 ppm
	Short time value (Workplace exposure limit (EH40/2005))	25 mg/m <sup>3</sup>
Butane	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	600 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1450 mg/m <sup>3</sup>
	Short time value (Workplace exposure limit (EH40/2005))	750 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1810 mg/m <sup>3</sup>
Propan-2-ol	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	400 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	999 mg/m <sup>3</sup>
	Short time value (Workplace exposure limit (EH40/2005))	500 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1250 mg/m <sup>3</sup>

## USA (TLV-ACGIH)

2-Butoxyethanol (EGBE)	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	20 ppm
2-propanol	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	200 ppm
	Short time value (TLV - Adopted Value)	400 ppm
Ammonia	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	25 ppm
	Short time value (TLV - Adopted Value)	35 ppm
Butane, all isomers	Short time value (TLV - Adopted Value)	1000 ppm

### b) National biological limit values

If limit values are applicable and available these will be listed below.

#### Germany

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2-Butoxyethanol (Butoxyessigsäure (nach Hydrolyse))	Urin: bei langzeitexposition: nach mehreren vorangegangenen schichten	200 mg/l	11/2012 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG
2-Butoxyethanol (Butoxyessigsäure)	Urin: bei langzeitexposition: nach mehreren vorangegangenen schichten	100 mg/l	11/2012 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG
Propan-2-ol (Aceton)	Urin: expositionsende, bzw. schichtende	25 mg/l	11/2012 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG
Propan-2-ol (Aceton)	Vollblut: expositionsende, bzw. schichtende	25 mg/l	11/2012 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG
Vitamin K-Antagonisten (Quick-Wert)	Vollblut: keine beschränkung	Reduktion auf nicht weniger als 70%	11/2012 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG

## UK

2-Butoxyethanol (butoxyacetic acid)	Urine: post shift	240 mmol/mol creatinine	
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## USA (BEI-ACGIH)

2-butoxyethanol (Butoxyacetic acid (BAA))	urine: end of shift	200 mg/g creatinine	
2-Propanol (Acetone)	Urine: end of shift at end of workweek	40 mg/L	

### 8.1.2 Sampling methods

If applicable and available it will be listed below.

2-Butoxyethanol (Alcohols IV)	NIOSH	1403
2-Butoxyethanol (Butyl Cellosolve solvent)	OSHA	83
Ammonia (organic and inorganic gases by Extractive FTIR)	NIOSH	3800
Ammonia	NIOSH	6015
Ammonia	NIOSH	6015REV
Ammonia	NIOSH	6016
Ammonia	NON	41
Ammonia	OSHA	ID188
Butoxyacetic acid	NIOSH	8316
Butyl cellosolve (Volatile Organic compounds)	NIOSH	2549
Butyl Cellosolve	OSHA	83
Isopropanol (Volatile Organic compounds)	NIOSH	2549
Isopropyl Alcohol (Alcohols I)	NIOSH	1400
Isopropyl Alcohol	OSHA	109

### 8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

### 8.1.4 DNEL/PNEC values

#### DNEL/DMEL - Workers

##### 2-butoxyethanol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	98 mg/m <sup>3</sup>	
	Acute systemic effects inhalation	1091 mg/m <sup>3</sup>	
	Acute local effects inhalation	246 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	125 mg/kg bw/day	
	Acute systemic effects dermal	89 mg/kg bw/day	

##### propan-2-ol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	500 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	888 mg/kg bw/day	

##### ammonia

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	47.6 mg/m <sup>3</sup>	Test data of the pure substance
	Acute systemic effects inhalation	47.6 mg/m <sup>3</sup>	Test data of the pure substance
	Long-term local effects inhalation	14 mg/m <sup>3</sup>	Test data of the pure substance
	Acute local effects inhalation	36 mg/m <sup>3</sup>	Test data of the pure substance
	Long-term systemic effects dermal	6.8 mg/kg bw/day	Test data of the pure substance
	Acute systemic effects dermal	6.8 mg/kg bw/day	Test data of the pure substance

#### DNEL/DMEL - General population

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## 2-butoxyethanol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	59 mg/m <sup>3</sup>	
	Acute systemic effects inhalation	426 mg/m <sup>3</sup>	
	Acute local effects inhalation	147 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	75 mg/kg bw/day	
	Acute systemic effects dermal	89 mg/kg bw/day	
	Long-term systemic effects oral	6.3 mg/kg bw/day	
	Acute systemic effects oral	26.7 mg/kg bw/day	

## propan-2-ol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	89 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	319 mg/kg bw/day	
	Long-term systemic effects oral	26 mg/kg bw/day	

## ammonia

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	23.8 mg/m <sup>3</sup>	Test data of the pure substance
	Acute systemic effects inhalation	23.8 mg/m <sup>3</sup>	Test data of the pure substance
	Long-term local effects inhalation	2.8 mg/m <sup>3</sup>	Test data of the pure substance
	Acute local effects inhalation	7.2 mg/m <sup>3</sup>	Test data of the pure substance
	Long-term systemic effects dermal	68 mg/kg bw/day	Test data of the pure substance
	Acute systemic effects dermal	68 mg/kg bw/day	Test data of the pure substance
	Long-term systemic effects oral	6.8 mg/kg bw/day	Test data of the pure substance
	Acute systemic effects oral	6.8 mg/kg bw/day	Test data of the pure substance

## PNEC

### 2-butoxyethanol

Compartments	Value	Remark
Fresh water	8.8 mg/l	
Marine water	0.88 mg/l	
Aqua (intermittent releases)	9.1 mg/l	
STP	463 mg/l	
Fresh water sediment	34.6 mg/kg sediment dw	
Marine water sediment	3.46 mg/kg sediment dw	
Soil	2.33 mg/kg soil dw	
Oral	0.02 g/kg food	

### propan-2-ol

Compartments	Value	Remark
Fresh water	140.9 mg/l	
Marine water	140.9 mg/l	
STP	2251 mg/l	
Fresh water sediment	552 mg/kg sediment dw	
Marine water sediment	552 mg/kg sediment dw	
Soil	28 mg/kg soil dw	
Oral	160 mg/kg food	

### ammonia

Compartments	Value	Remark
Fresh water	0.0011 mg/l	Test data of the pure substance
Marine water	0.0011 mg/l	Test data of the pure substance
Aqua (intermittent releases)	0.0068 mg/l	Test data of the pure substance

### 8.1.5 Control banding

If applicable and available it will be listed below.

## 8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 8.2.1 Appropriate engineering controls

Use spark-/explosionproof appliances and lighting system. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Measure the concentration in the air regularly.

### 8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Keep container tightly closed. Do not eat, drink or smoke during work.

#### a) Respiratory protection:

Wear gas mask with filter type A if conc. in air > exposure limit.

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## b) Hand protection:

Gloves.

Materials	Breakthrough time	Thickness
nitrile rubber	> 480 minutes	0.35 mm

- materials (excellent resistance)

Nitrile rubber.

## c) Eye protection:

Protective goggles.

## d) Skin protection:

Protective clothing.

## 8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical form (*)	Aerosol
Odour (*)	Characteristic odour
Odour threshold	No data available
Colour (*)	No data available on colour
Particle size (*)	No data available
Explosion limits (*)	1.13 - 12 vol %
Flammability (*)	Extremely flammable aerosol.
Log Kow (*)	Not applicable (mixture)
Dynamic viscosity (*)	No data available
Kinematic viscosity (*)	No data available
Melting point (*)	No data available
Boiling point (*)	No data available
Flash point (*)	No data available
Evaporation rate (*)	No data available
Relative vapour density (*)	> 1
Vapour pressure (*)	No data available
Solubility (*)	water ; soluble
Relative density (*)	0.99 ; 20 °C ; Liquid
Decomposition temperature	No data available
Auto-ignition temperature (*)	230 °C
Explosive properties (*)	No chemical group associated with explosive properties
Oxidising properties (*)	No chemical group associated with oxidising properties
pH (*)	10.4

### 9.2. Other information

Absolute density	992 kg/m <sup>3</sup> ; 20 °C ; Liquid
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No data available.

### 10.4. Conditions to avoid

Use spark-/explosionproof appliances and lighting system. Keep away from naked flames/heat. Keep away from ignition sources/sparks.

### 10.5. Incompatible materials

No data available.

### 10.6. Hazardous decomposition products

Upon combustion: CO and CO<sub>2</sub> are formed.



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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### 11.1.1 Test results

##### Acute toxicity

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No (test) data on the mixture available

###### 2-butoxyethanol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	1746 mg/kg bw		Rat (male)	Experimental value	
Dermal			category 4			Annex VI	
Dermal	LD50	OECD 402	> 2000 mg/kg bw		Rat (male/female)	Experimental value	
Inhalation			category 4			Expert judgement	
Inhalation (vapours)	LC50	Equivalent to OECD 403	450 ppm	4 h	Rat (female)	Experimental value	
Inhalation (vapours)	LC50	Equivalent to OECD 403	486 ppm	4 h	Rat (male)	Experimental value	

###### propan-2-ol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	5840 mg/kg bw		Rat	Experimental value	
Dermal	LD50	Equivalent to OECD 402	13120 mg/kg bw	24 h	Rabbit	Experimental value	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 10000 ppm	6 h	Rat (male/female)	Experimental value	

###### ammonia

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	350 mg/kg bw		Rat (male)	Experimental value	Aqueous solution
Dermal						Data waiving	
Inhalation						Annex VI	Not classified
Inhalation	LC50		9850 mg/m <sup>3</sup> air	60 minutes	Rat (male)	Experimental value	Anhydrous form

Judgement is based on the relevant ingredients

##### Conclusion

Not classified for acute toxicity

##### Corrosion/irritation

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No (test) data on the mixture available

###### 2-butoxyethanol

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating	OECD 405	24 h	24; 48; 72 hours	Rabbit	Experimental value	Single treatment with rinsing
Skin	Irritating	OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	

###### propan-2-ol

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating	Equivalent to OECD 405		24 hours	Rabbit	Experimental value	Single treatment
Skin	Not irritating		4 h	4; 24; 48; 72 hours	Rabbit	Experimental value	

###### ammonia

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye						Data waiving	
Skin	Corrosive; category 1B					Annex VI	

Judgement is based on the relevant ingredients

Reason for revision: 1.1

Publication date: 2000-09-16

Date of revision: 2017-01-10

Revision number: 1003

Product number: 32180

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# MULTICLEAN

## Conclusion

Not classified as irritating to the skin  
Not classified as irritating to the eyes

## Respiratory or skin sensitisation

### MULTICLEAN

No (test)data on the mixture available

#### 2-butoxyethanol

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 406		24; 48 hours	Guinea pig (male/female)	Experimental value	

#### propan-2-ol

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 406		24; 48 hours	Guinea pig (male/female)	Experimental value	

#### ammonia

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin						Data waiving	
Inhalation						Data waiving	

Judgement is based on the relevant ingredients

## Conclusion

Not classified as sensitizing for skin

## Specific target organ toxicity

### MULTICLEAN

No (test)data on the mixture available

#### 2-butoxyethanol

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (drinking water)	NOAEL	Equivalent to OECD 408	< 69 mg/kg bw/day			90 days (continuous)	Rat (male)	Experimental value
Dermal	NOAEL	Equivalent to OECD 411	150 mg/kg bw/day		No effect	90 day(s)	Rabbit (male/female)	Experimental value
Inhalation	LOAEC	OECD 453	152 mg/m <sup>3</sup>	Blood	Histology	102 weeks (daily, 5 days/week)	Rat (male/female)	Experimental value

#### propan-2-ol

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral								Data waiving
Dermal								Data waiving
Inhalation (vapours)	NOAEC	OECD 451	5000 ppm		No effect	104 weeks (6h/day, 5 days/week)	Rat (male/female)	Experimental value

#### ammonia

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	NOAEL	OECD 422	250 mg/kg bw/day	General	No effect	35 day(s)	Rat (male/female)	Read-across
Oral (stomach tube)	LOAEL	OECD 422	750 mg/kg bw/day	General	Overall effects	35 day(s)	Rat (male/female)	Read-across
Dermal								Data waiving
Inhalation (gases)	LOEL	Subchronic toxicity test	119 mg/m <sup>3</sup> air	General	Histopathology	18 weeks (6h/day, 5 days/week)	Guinea pig (male)	Experimental value

Judgement is based on the relevant ingredients

## Conclusion

Not classified for subchronic toxicity

## Mutagenicity (in vitro)

### MULTICLEAN

No (test)data on the mixture available

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## 2-butoxyethanol

Result	Method	Test substrate	Effect	Value determination
Negative	Equivalent to OECD 471	Bacteria (S.typhimurium)		Experimental value
Negative	Equivalent to OECD 476	Hamster ovary		Experimental value

## propan-2-ol

Result	Method	Test substrate	Effect	Value determination
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 476	Chinese hamster ovary (CHO)	No effect	Experimental value

## ammonia

Result	Method	Test substrate	Effect	Value determination
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value

## Mutagenicity (in vivo)

### MULTICLEAN

No (test) data on the mixture available

#### 2-butoxyethanol

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD 474		Mouse (male)		Experimental value

#### propan-2-ol

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD 474		Mouse (male/female)		Experimental value

#### ammonia

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD 474		Mouse (male)	Bone marrow	Read-across

Judgement is based on the relevant ingredients

### Conclusion

Not classified for mutagenic or genotoxic toxicity

## Carcinogenicity

### MULTICLEAN

No (test) data on the mixture available

#### 2-butoxyethanol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation	NOAEC	Equivalent to OECD 451	0 ppm	2 year(s)	Rat (male/female)	Neoplastic effects		Experimental value
Inhalation	NOAEC	Equivalent to OECD 451	125 ppm	2 year(s)	Mouse (male/female)	Neoplastic effects		Experimental value

#### propan-2-ol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation (vapours)	NOEL	OECD 451	5000 ppm	104 weeks (6h/day, 5 days/week)	Rat (male/female)	No carcinogenic effect		Experimental value

#### ammonia

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Oral	NOAEL	Equivalent to OECD 453	256 mg/kg bw/day	104 weeks (daily)	Rat (female)	No carcinogenic effect		Read-across

Judgement is based on the relevant ingredients

### Conclusion

Not classified for carcinogenicity

## Reproductive toxicity

### MULTICLEAN

No (test) data on the mixture available

Reason for revision: 1.1

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## 2-butoxyethanol

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	OECD 414	100 mg/kg bw/day	5 day(s)	Rat	Weight changes		Experimental value
	NOAEC	Equivalent to OECD 414	100 ppm	12 day(s)	Rabbit			Experimental value
Effects on fertility	NOAEL (P/F1/F2)	Other	720 mg/kg bw/day	14 weeks (daily)	Mouse (male/female)	No effect		Experimental value

## propan-2-ol

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	Equivalent to OECD 414	400 mg/kg bw/day	10 day(s)	Rat	No effect	Foetus	Experimental value
Maternal toxicity	NOAEL	Equivalent to OECD 414	400 mg/kg bw/day	10 day(s)	Rat (female)	No effect		Experimental value
Effects on fertility	NOAEL	Equivalent to OECD 415	853 mg/kg bw/day	21 day(s) - 70 day(s)	Rat (male/female)	No effect		Experimental value

## ammonia

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	Equivalent to OECD 414	100 mg/kg bw/day	23 day(s)	Rabbit	No effect		Read-across
Maternal toxicity	NOAEL	Equivalent to OECD 414	1 mg/kg bw/day	23 day(s)	Rabbit	No effect		Read-across
Effects on fertility	NOAEL (P)	OECD 422	1500 mg/kg bw/day	28 day(s) - 53 day(s)	Rat (male/female)	No effect		Read-across

Judgement is based on the relevant ingredients

### Conclusion

Not classified for reprotoxic or developmental toxicity

### Toxicity other effects

#### MULTICLEAN

No (test)data on the mixture available

### Chronic effects from short and long-term exposure

#### MULTICLEAN

No effects known.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### MULTICLEAN

No (test)data on the mixture available

# MULTICLEAN

## 2-butoxyethanol

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	1474 mg/l	96 h	Oncorhynchus mykiss	Static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	EC50	OECD 202	1550 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	EC50	OECD 201	911 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Nominal concentration
	NOEC	OECD 201	88 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Nominal concentration
Long-term toxicity fish	NOEC	Equivalent to OECD 204	> 100 mg/l	21 day(s)	Danio rerio	Semi-static system	Fresh water	Experimental value; Nominal concentration
Long-term toxicity aquatic crustacea	NOEC	OECD 211	100 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; Reproduction
Toxicity aquatic micro-organisms	Toxicity threshold	Equivalent to DIN 38412/8	700 mg/l	16 h	Pseudomonas putida	Static system	Fresh water	Experimental value; Nominal concentration

## propan-2-ol

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Equivalent to OECD 203	9640 mg/l - 10000 mg/l	96 h	Pimephales promelas	Flow-through system	Fresh water	Experimental value; Lethal
Acute toxicity crustacea	LC50	Equivalent to OECD 202	> 10000 mg/l	24 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	Toxicity threshold		1800 mg/l	7 day(s)	Scenedesmus quadricauda	Static system	Fresh water	Experimental value; Toxicity test
Long-term toxicity fish								Data waiving
Long-term toxicity aquatic crustacea	NOEC		2344 µmol/l	16 day(s)	Daphnia magna		Fresh water	Experimental value; Growth
Toxicity aquatic micro-organisms	Toxicity threshold	Equivalent to DIN 38412/8	1050 mg/l	16 h	Pseudomonas putida	Static system	Fresh water	Experimental value; Toxicity test
	EC50	ISO 8192	41676 mg/l	30 minutes	Bacteria			Experimental value; Activated sludge

## ammonia

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Other	0.6 mg/l - 1.1 mg/l	96 h	Oncorhynchus mykiss	Flow-through system	Fresh water	Experimental value

Judgement is based on the relevant ingredients

## Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

## 12.2. Persistence and degradability

### 2-butoxyethanol

#### Biodegradation water

Method	Value	Duration	Value determination
OECD 301B: CO2 Evolution Test	90.4 %	28 day(s)	Experimental value

#### Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.90	5.46 h	1500000 /cm <sup>3</sup>	Calculated value

# MULTICLEAN

propan-2-ol

## Biodegradation water

Method	Value	Duration	Value determination
OECD 301E: Modified OECD Screening Test	95 %	21 day(s)	Experimental value

## Biodegradation soil

Method	Value	Duration	Value determination
			Data waiving

## Half-life water (t1/2 water)

Method	Value	Primary degradation/mineralisation	Value determination
			Data waiving

## Conclusion

The surfactant(s) is/are biodegradable

## 12.3. Bioaccumulative potential

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### Log Kow (\*)

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

2-butoxyethanol

### Log Kow (\*)

Method	Remark	Value	Temperature	Value determination
		0.81	20 °C	Test data

propan-2-ol

### Log Kow (\*)

Method	Remark	Value	Temperature	Value determination
Other		0.05	25 °C	Weight of evidence approach

ammonia

### Log Kow (\*)

Method	Remark	Value	Temperature	Value determination
		0.23	25 °C	Estimated value

## Conclusion

Does not contain bioaccumulative component(s)

## 12.4. Mobility in soil

2-butoxyethanol

### Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
0.041 atm m <sup>3</sup> /mol	Other	20 °C		Experimental value

### Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level I	0.31 %	0 %	0.01 %	0.59 %	99.09 %	QSAR
Mackay level III	1.01 %	0 %	0.37 %	51.9 %	46.8 %	QSAR

propan-2-ol

### (log) Koc

Parameter	Method	Value	Value determination
			Data waiving

## Conclusion

Contains component(s) with potential for mobility in the soil

## 12.5. Results of PBT and vPvB assessment

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

## 12.6. Other adverse effects

MULTICLEAN

### Fluorinated greenhouse gases (Regulation (EU) No 517/2014)

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

### Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

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# MULTICLEAN

## 2-butoxyethanol

### Ground water

Ground water pollutant

## propan-2-ol

### Ground water

Ground water pollutant

## ammonia

### Ground water

Ground water pollutant

## SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 13.1. Waste treatment methods

#### 13.1.1 Provisions relating to waste

##### European Union

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014.

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

20 01 29\* (separately collected fractions (except 15 01): detergents containing hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

#### 13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Specific treatment. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into the sewer. Contains a component for which a prohibition exists against discharge into surface water.

#### 13.1.3 Packaging/Container

##### European Union

Waste material code packaging (Directive 2008/98/EC).

15 01 10\* (packaging containing residues of or contaminated by dangerous substances).

## SECTION 14: Transport information

### Road (ADR)

#### 14.1. UN number

UN number	1950
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#### 14.2. UN proper shipping name

Proper shipping name	Aerosols
----------------------	----------

#### 14.3. Transport hazard class(es)

Hazard identification number	
Class	2
Classification code	5F

#### 14.4. Packing group

Packing group	
Labels	2.1

#### 14.5. Environmental hazards

Environmentally hazardous substance mark	no
--	----

#### 14.6. Special precautions for user

Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

### Rail (RID)

#### 14.1. UN number

UN number	1950
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#### 14.2. UN proper shipping name

Proper shipping name	Aerosols
----------------------	----------

#### 14.3. Transport hazard class(es)

Reason for revision: 1.1

Publication date: 2000-09-16

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Hazard identification number	23
Class	2
Classification code	5F

#### 14.4. Packing group

Packing group	
Labels	2.1

#### 14.5. Environmental hazards

Environmentally hazardous substance mark	no
--	----

#### 14.6. Special precautions for user

Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

### Inland waterways (ADN)

#### 14.1. UN number

UN number	1950
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#### 14.2. UN proper shipping name

Proper shipping name	Aerosols
----------------------	----------

#### 14.3. Transport hazard class(es)

Class	2
Classification code	5F

#### 14.4. Packing group

Packing group	
Labels	2.1

#### 14.5. Environmental hazards

Environmentally hazardous substance mark	no
--	----

#### 14.6. Special precautions for user

Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

### Sea (IMDG/IMSBC)

#### 14.1. UN number

UN number	1950
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#### 14.2. UN proper shipping name

Proper shipping name	Aerosols
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#### 14.3. Transport hazard class(es)

Class	2.1
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#### 14.4. Packing group

Packing group	
Labels	2.1

#### 14.5. Environmental hazards

Marine pollutant	-
Environmentally hazardous substance mark	no

#### 14.6. Special precautions for user

Special provisions	63
Special provisions	190
Special provisions	277
Special provisions	327
Special provisions	344
Special provisions	381
Special provisions	959
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Annex II of MARPOL 73/78 (*)	Not applicable
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Reason for revision: 1.1

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## Air (ICAO-TI/IATA-DGR)

14.1. UN number	UN number	1950
14.2. UN proper shipping name	Proper shipping name	Aerosols, flammable
14.3. Transport hazard class(es)	Class	2.1
14.4. Packing group	Packing group	
	Labels	2.1
14.5. Environmental hazards	Environmentally hazardous substance mark	no
14.6. Special precautions for user	Special provisions	A145
	Special provisions	A167
	Special provisions	A802
	limited quantities: maximum net quantity per packaging	30 kg G

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### European legislation:

VOC content Directive 2010/75/EU (\*)

VOC content	Remark
14.5 %	
138.643 g/l	

Indicative occupational exposure limit values (Directive 98/24/EC, 2000/39/EC and 2009/161/EU)

Product name	Skin resorption
2-Butoxyethanol	Skin

Ingredients according to Regulation (EC) No 648/2004 and amendments

5-15% aliphatic hydrocarbons, perfumes, limonene

European drinking water standards (Directive 98/83/EC)

#### ammonia

Parameter	Parametric value	Note	Reference
Ammonium	0,5 mg/l		Listed in Annex I, Part C, of Directive 98/83/EC on the quality of water intended for human consumption.

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
<ul style="list-style-type: none"> <li>· 2-butoxyethanol</li> <li>· propan-2-ol</li> <li>· ammonia</li> </ul>	<p>Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008:</p> <p>(a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F;</p> <p>(b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10;</p> <p>(c) hazard class 4.1;</p> <p>(d) hazard class 5.1.</p>	<p>1. Shall not be used in:</p> <ul style="list-style-type: none"> <li>— ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,</li> <li>— tricks and jokes,</li> <li>— games for one or more participants, or any article intended to be used as such, even with ornamental aspects,</li> </ul> <p>2. Articles not complying with paragraph 1 shall not be placed on the market.</p> <p>3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:</p> <ul style="list-style-type: none"> <li>— can be used as fuel in decorative oil lamps for supply to the general public, and,</li> <li>— present an aspiration hazard and are labelled with R65 or H304,</li> </ul> <p>4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).</p> <p>5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:</p> <ul style="list-style-type: none"> <li>a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life-threatening lung damage";</li> <li>b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead to life-threatening lung damage";</li> <li>c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.</li> </ul> <p>No later than 1 June 2014, the Commission shall request the European Chemicals Agency to</p>

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		prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public.7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.'
propan-2-ol	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to that Regulation or not.	1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following: — metallic glitter intended mainly for decoration, — artificial snow and frost, — “whoopie” cushions, — silly string aerosols, — imitation excrement, — horns for parties, — decorative flakes and foams, — artificial cobwebs, — stink bombs.2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with: “For professional users only”.3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/ 324/EEC.4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.

## National legislation Belgium

### MULTICLEAN

No data available

### 2-butoxyethanol

Résorption peau	2-Butoxyéthanol; D; La mention “D” signifie que la résorption de l’agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l’exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l’agent dans l’air.
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## National legislation The Netherlands

### MULTICLEAN

Waste identification (the Netherlands)	LWCA (the Netherlands): KGA category 06
Waterbezwaarlijkheid	B (2)

### 2-butoxyethanol

Huidopname (wettelijk)	2-Butoxyethanol; H
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## National legislation France

### MULTICLEAN

No data available

### 2-butoxyethanol

VME - Risque de pénétration percutanée	2-Butoxyéthanol; PP
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## National legislation Germany

### MULTICLEAN

WGK	1; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4)
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### 2-butoxyethanol

TA-Luft	5.2.5
TRGS900 - Risiko der Fruchtschädigung	2-Butoxyethanol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
Hautresorptive Stoffe	2-Butoxyethanol; H; Hautresorptiv

### propan-2-ol

TA-Luft	5.2.5
TRGS900 - Risiko der Fruchtschädigung	Propan-2-ol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden

### ammonia

TRGS900 - Risiko der Fruchtschädigung	Ammoniak; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
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## National legislation United Kingdom

### MULTICLEAN

No data available

### 2-butoxyethanol

Skin absorption	2-Butoxyethanol; Sk
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## Other relevant data

### MULTICLEAN

No data available

### 2-butoxyethanol

IARC - classification	3; 2-butoxyethanol
TLV - Carcinogen	2-Butoxyethanol (EGBE); A3

### propan-2-ol

IARC - classification	3; Isopropanol
TLV - Carcinogen	2-propanol; A4

## 15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

## SECTION 16: Other information

### Full text of any H-statements referred to under headings 2 and 3:

- H220 Extremely flammable gas.
- H222 Extremely flammable aerosol.
- H225 Highly flammable liquid and vapour.
- H229 Pressurised container: May burst if heated.
- H280 Contains gas under pressure; may explode if heated.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H336 May cause drowsiness or dizziness.
- H400 Very toxic to aquatic life.

(*)	INTERNAL CLASSIFICATION BY BIG
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

### M-factor

ammonia	1	Acute	BIG
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### Specific concentration limits CLP

ammonia	C ≥ 5 %	STOT SE 3; H335	CLP Annex VI (ATP 0)
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